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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,373	12/12/2003	Fernando Garcia-Osuna	26.0263 US	1833
30686	7590	03/07/2005	EXAMINER	
SCHLUMBERGER K.K. 2-2-1 FUCHINOBE SAGAMIHARA-SHI, KANAOAWA-KEN, JAPAN			LOBO, IAN J	
229-0006			ART UNIT	PAPER NUMBER
			3662	

DATE MAILED: 03/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/735,373

Applicant(s)

GARCIA-OSUNA ET AL.

Examiner

Ian J. Lobo

Art Unit

3662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 8-10 is/are rejected.
- 7) ☒ Claim(s) 2-7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Vanderschuel ('204).

Per claim 1, see Vanderschuel, col. 1, lines 39-49 and col. 55, lines 43+.

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Marks (464).

Per claim 1, see Marks, col. 1, lines 61-64, col. 2, lines 20-56.

4. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Smith ('666).

Per claim 1, see Fig. 1 of Smith.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over the Russian reference to Tereshenko et al ('481) when taken in view of Vanderschel ('204) or Marks ('464).

Per claim 1, Tereshenko et al discloses a system for calibrating an acoustic logging tool.

The difference between claim 1 and Tereshenko et al reference is the claim specifies calibrating a logging tool having a plurality of acoustic receivers mounted thereto. Tereshenko et al does not disclose that the logging tool being calibrated has plural receivers.

Vanderschuel discloses a well logging system including a borehole logging tool that is calibrated (col. 1, lines 39-49, col. 55, lines 43+). It is taught by Vanderschel that borehole logging tools include a plurality of acoustic receivers. Similarly, Marks (col. 2, lines 32-55) teaches that acoustic logging tools include plural receivers. Thus, in view of Vanderschel or Marks, it would appear that the system for calibrating the logging tool of Tereshenko et al would include the calibration of plural receivers since plural receivers are part of conventional logging tools.

7. Claims 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Marks ('464) when taken in view of Vanderschel ('204)

Per claim 8, Marks system includes an acoustic tool (10) comprising a plurality of receivers (14, 16), an acoustic chamber (20) receptive of the acoustic tool (10), a plurality of spacers (36), a computer (68).

The difference between claim 8 and Marks system is Marks does not disclose that the computer includes a set of instructions for calibrating the acoustic receivers.

Vanderschel teaches (col. 55, lines 43+) that it is known that logging tools that are connected to computers have instructions in the computers for calibrating the acoustic receivers. Thus, it would be obvious to one of ordinary skill in the art that the computer of Marks includes software for calibrating the acoustic receivers. Claim 8 is so rejected.

Per claim 10, it would appear that the claimed 300 psi of the acoustic chamber is an obvious design variation of Marks.

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marks in view of Vandershel as applied to claim 8 above, and further in view of Sinha et al ('835).

Claim 9 differs from the above noted Marks patent by claiming that the acoustic tool has multiple receiver stations spaced axially and each receiver station has a plurality of azimuthally arranged receivers.

Sinha et al teaches a sonde or logging tool where receiver stations are spaced axially and each station has a plurality of azimuthally arranged receivers so as to detect the plurality of waves (i.e, stoneley, shear, compressional, etc) propagating in a borehole formation. It would have been obvious to one of ordinary skill in the art to modify Marks to include the plural receivers arranged in an azimuthal configuration and spaced radially apart so as to detect the full spectrum of borehole and formation wave energy.

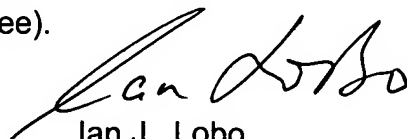
***Allowable Subject Matter***

9. Claims 2-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian J. Lobo whose telephone number is (703) 306-4161. The examiner can normally be reached on Monday - Friday, 6:30 - 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas H. Tarcza can be reached on (703) 306-4171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ian J. Lobo  
Primary Examiner  
Art Unit 3662